

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application.

Listing of Claims:

1. **(Previously Presented)** An animal cell expressing a gene coding a ligand-responsive transcription control factor and stably transformed with a DNA comprising in a molecule, the following genes (a) and (b):

- (a) a reporter gene connected downstream from a transcription control region, in which said transcription control region substantially consists of a recognition sequence of said ligand-responsive transcription control factor and a minimum promoter which can function in said cell; and
- (b) a selective marker gene which can function in said cell;

provided that the following gene (c):

- (c) a reporter gene connected downstream from a promoter which transcription activity is unchanged by having said ligand-responsive transcription control factor contacted with a ligand of said ligand-responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a) is not present in said cell.

2. (**Previously Presented**) An animal cell expressing a gene coding a ligand-responsive transcription control factor and stably transformed with a DNA comprising in a molecule, the following genes (a) and (b):

- (a) a reporter gene connected downstream from a transcription control region, in which said transcription control region substantially consists of a recognition sequence of said ligand-responsive transcription control factor and a minimum promoter substantially consisting of a TATA box which can function in said cell and
- (b) a selective marker gene which can function in said cell;

provided that the following gene (c):

(c) a reporter gene connected downstream from a promoter which transcription activity is unchanged by having a ligand-responsive transcription control factor contacted with a ligand of said ligand-responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a) is not present in said cell.

3. (**Previously Presented**) The cell according to claim 1, wherein said ligand-responsive transcription control factor is one selected from an aryl hydrocarbon receptor, intranuclear hormone receptor, estrogen receptor, androgen receptor and thyroid hormone receptor.

4. (**Previously Presented**) The cell according to claim 1, wherein said ligand-responsive transcription control factor is an aryl hydrocarbon receptor.

5. (**Original**) The cell according to claim 1, wherein said ligand-responsive transcription control factor is an intranuclear hormone receptor.

6. (**Original**) The cell according to claim 1, wherein said ligand-responsive transcription control factor is an estrogen receptor.

7. (**Original**) The cell according to claim 1, wherein said ligand-responsive transcription control factor is an androgen receptor.

8. (**Original**) The cell according to claim 1, wherein said ligand-responsive transcription control factor is a thyroid hormone receptor.

9. (**Previously Presented**) An animal cell expressing an aryl hydrocarbon receptor and an Arnt receptor, and stably transformed with a DNA comprising in a molecule, the following genes (a) and (b):

(a) a reporter gene connected downstream from a transcription control region, wherein said transcription control region substantially consists of a recognition sequence of said aryl hydrocarbon receptor and a minimum promoter which can function in said cell and

(b) a selective marker gene which can function in said cell;

provided that the following gene (c):

(c) a reporter gene connected downstream from a promoter which transcription activity is unchanged by having a ligand-responsive transcription control factor contacted with a

ligand of said ligand-responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a) is not present in said cell.

10. **(Canceled)**

11. **(Currently Amended)** A method for evaluating a chemical substance to have agonist activity over the transcription promoting ability of a ligand-responsive transcription control factor, said method comprising:

- (i) culturing an animal cell according to any one of claims 1 to 9 in the presence of the chemical substance;
- (ii) measuring the expression amount of reporter gene (a) in said cell and
- (iii) assessing said chemical substance to have agonist activity over the transcription promoting ability of the ligand-responsive transcription control factor when the measured value of expression amount measured in the step (ii) of said reporter gene (a) introduced into said cell is larger than a measured value of expression amount of said reporter gene (a) in the absence of said chemical substance.

12. **(Currently Amended)** A method for evaluating a chemical substance to have antagonist activity over the transcription promoting ability of a ligand-responsive transcription control factor, said method comprising:

- (i) culturing an animal cell according to any one of claims 1 to 9 in the presence of the chemical substance and a ligand of said ligand-responsive transcription control factor;
- (ii) measuring the expression amount of reporter gene (a) in said cell and
- (iii) assessing said chemical substance to have antagonist activity over the transcription promoting ability of the ligand-responsive transcription control factor when the measured value of expression amount measured in the step (ii) of said reporter gene (a) introduced into said cell is smaller than a measured value of expression amount of said reporter gene (a) in the presence of said ligand and the absence of said chemical substance.

13. (**Original**) A measuring kit comprising an animal cell according to any one of claims 1 to 9.

14. (**Currently Amended**) A method for obtaining an animal cell for measuring the ability to control the activity of a ligand-responsive transcription control factor, said method comprising:

- (i) introducing into an animal cell, a DNA comprising in a molecule the following genes (a) and (b):
 - (a) a reporter gene connected downstream from a transcription control region, wherein said transcription control region substantially consists of a recognition sequence of said ligand-responsive transcription control factor and a minimum promoter which can function in said cell, and

(b) a selective marker gene which can function in said cell,

said animal cell being

an animal cell into which that comprises a DNA comprising a gene coding the ligand-responsive transcription control factor is introduced thereto before, after or during the same time of the above step (i) or an animal cell that naturally has an ability to express the gene coding the ligand-responsive transcription control factor,

provided that a reporter gene (c) connected downstream from a promoter which transcription activity is unchanged by having said ligand-responsive transcription control factor contacted with a ligand of said ligand-responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a), is not present in the cell; and

(ii) recovering from the transformed cell obtained from step (i), a transformed cell having said introduced DNA stably maintained therein.

15. (**Currently Amended**) The method according to claim 14, wherein said cell is an animal cell into which that comprises a DNA comprising a gene coding the ligand-responsive transcription control factor is introduced thereto before, after or during the same time of the step (i).

16. (**Previously Presented**) The method according to claim 15, wherein the DNA comprising a gene coding the ligand-responsive transcription control factor, comprises in a

molecule, a selective marker gene which can function in said cell and which encodes a polypeptide that confers a phenotype different from that of the gene (b).

17. **(Currently Amended)** An animal cell expressing a gene coding a ligand-responsive transcription control factor and stably transformed with a DNA comprising in a molecule, the following genes (a) and (b):

(a) a reporter gene connected downstream from a transcription control region; wherein said transcription control region contains a minimum promoter and a recognition sequence of the ligand-responsive transcription control factor and contains no sequence which would alter the activity of having the transcription control region containing ability changed by the ligand-responsive transcription control factor recognition sequence and minimum promoter; and

(b) a selective marker gene which can function in said cell;

and provided that the following gene (c):

(c) a reporter gene connected downstream from a promoter which transcription activity is unchanged by having said ligand-responsive transcription control factor contacted with a ligand of said ligand-responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a)

is not present in said cell.

18. **(Canceled)**

19. (Previously Presented) The cell according to any one of claims 1, 2, 9 and 17, wherein said minimum promoter is a minimum promoter of metallothionein I gene or ovalbumin gene.

20. (New) An animal cell expressing a gene coding a ligand-responsive transcription control factor and stably transformed with a DNA comprising in a molecule, the following genes (a) and (b):

(a) a reporter gene connected downstream from a transcription control region, in which said transcription control region substantially consists of a recognition sequence of said ligand-responsive transcription control factor and a minimum promoter of mouse metallothionein I gene which can function in said cell; and

(b) a selective marker gene which can function in said cell;

provided that the following gene (c):

(c) a reporter gene connected downstream from a promoter which transcription activity is unchanged by having said ligand-responsive transcription control factor contacted with a ligand of said ligand-responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a)

is not present in said cell.

21. (New) An animal cell expressing a gene coding a ligand-responsive transcription control factor and stably transformed with a DNA comprising in a molecule, the following genes (a) and (b):

(a) a reporter gene connected downstream from a transcription control region, in which said transcription control region substantially consists of a recognition sequence of said ligand-responsive transcription control factor and a minimum promoter of chicken ovalbumin gene which can function in said cell; and

(b) a selective marker gene which can function in said cell;

provided that the following gene (c):

(c) a reporter gene connected downstream from a promoter which transcription activity is unchanged by having said ligand-responsive transcription control factor contacted with a ligand of said ligand-responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a)

is not present in said cell.

22. (New) The cell according to any one of claims 1, 2, 9, 17 and 20, wherein said minimum promoter has a nucleotide sequence from 33 base upstream to 15 base downstream of the transcription initiation point in the 5' upstream region of mouse metallothionein I gene.

23. (New) The cell according to any one of claims 1, 2, 9, 17 and 20, wherein said minimum promoter has the nucleotide sequence of SEQ ID NO: 5.

24. (New) The cell according to any one of claims 1, 2, 9, 17 and 21, wherein said minimum promoter has a nucleotide sequence from 40 base upstream to 10 base downstream of the transcription initiation point in the 5' upstream region of chicken ovalbumin gene.

25. (New) The cell according to any one of claims 1, 2, 9, 17, 20 and 21, wherein the expression amount of the reporter gene (a) in the presence of a ligand of said ligand-responsive transcription control factor is 5-fold or more of the expression amount of the reporter gene (a) in the absence of said ligand.

26. (New) The cell according to any one of claims 1, 2, 9, 17, 20 and 21, wherein the expression amount of the reporter gene (a) in the presence of a ligand of said ligand-responsive transcription control factor is 10-fold or more of the expression amount of the reporter gene (a) in the absence of said ligand.

27. (New) A method for obtaining an animal cell for measuring the ability to control the activity of a ligand-responsive transcription control factor, said method comprising:

(i) introducing into an animal cell, a DNA comprising in a molecule the following genes (a) and (b):

(a) a reporter gene connected downstream from a transcription control region, wherein said transcription control region substantially consists of a recognition sequence of said ligand-responsive transcription control factor and a minimum promoter which can function in said cell, and

(b) a selective marker gene which can function in said cell,

said animal cell being

an animal cell into which a DNA comprising a gene coding the ligand-responsive transcription control factor is introduced before, after or during the same time of the step (i) or an animal cell

that naturally has an ability to express the gene coding the ligand-responsive transcription control factor,

provided that a reporter gene (c) connected downstream from a promoter which transcription activity is unchanged by having said ligand-responsive transcription control factor contacted with a ligand of said ligand-responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a), is not present in the cell;

(ii) recovering from the transformed cell obtained from step (i), a transformed cell having said introduced DNA stably maintained therein; and

(iii) selecting from the transformed cell recovered in step (ii), a transformed cell in which the expression amount of the reporter gene (a) in the presence of a ligand of said ligand-responsive transcription control factor is 5-fold or more of the expression amount of the reporter gene (a) in the absence of said ligand.

28. (New) A method for obtaining an animal cell for measuring the ability to control the activity of a ligand-responsive transcription control factor, said method comprising:

(i) introducing into an animal cell, a DNA comprising in a molecule the following genes (a) and (b):

(a) a reporter gene connected downstream from a transcription control region, wherein said transcription control region substantially consists of a recognition sequence of said ligand-responsive transcription control factor and a minimum promoter which can function in said cell, and

(b) a selective marker gene which can function in said cell,

said animal cell being

an animal cell into which a DNA comprising a gene coding the ligand-responsive transcription control factor is introduced before, after or during the same time of the step (i) or an animal cell that naturally has an ability to express the gene coding the ligand-responsive transcription control factor,

provided that a reporter gene (c) connected downstream from a promoter which transcription activity is unchanged by having said ligand-responsive transcription control factor contacted with a ligand of said ligand-responsive transcription control factor, said reporter gene (c) coding a protein which can be differentiated from the protein coded by said gene (a), is not present in the cell;

(ii) recovering from the transformed cell obtained from step (i), a transformed cell having said introduced DNA stably maintained therein; and

(iii) selecting from the transformed cell recovered in step (ii), a transformed cell in which the expression amount of the reporter gene (a) in the presence of a ligand of said ligand-responsive transcription control factor is 10-fold or more of the expression amount of the reporter gene (a) in the absence of said ligand.

29. (**New**) The method according to any one of claims 14, 27 and 28, wherein said minimum promoter is a minimum promoter of mouse metallothionein I gene or chicken ovalbumin gene.